## ABSTRACT OF THE INVENTION

A gaseous flow sensor that utilizes non-platinum resistive sensing elements and a method for fabricating such sensor are disclosed. The gaseous flow sensor is constructed by an insulating substrate; a reference resistor formed on the substrate and disposed in the gaseous flow at an ambient temperature without heating; a flow-sensing resistor formed on the substrate disposed in the gaseous flow that is heated to a temperature higher than the ambient temperature; and an electrical circuit in electrical communication with the reference resistor and the flow-sensing resistor for feeding a current into the flow-sensing resistor in order to keep the two resistors at the same temperature during the operation of the gaseous flow sensor.